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Adolescent Suicide Death, AKVDRS Update — Alaska, 2016–2019

Background

During 2016–2019, two out of three violent deaths in Alaska were due to intentional self-harm (suicide).[1] In 2018 (the most recent data available), one out of five deaths among adolescents aged 12–19 years in the United States (U.S.) were due to suicide. Nationally, the suicide rate among adolescents increased by 17% during 2016–2018 (from 7.5 to 8.8 per 100,000, respectively).[2] This *Bulletin* provides an update on adolescent suicide deaths in Alaska.

Methods

Alaska Violent Death Reporting System (AKVDRS) data from 2016–2019 were analyzed using the abstractor-assigned manner of death per the National Violent Death Reporting System guidelines. Deaths were counted if the decedent was fatally injured in Alaska and was aged 12–19 years. Unadjusted (crude) rates were calculated using Alaska Department of Labor population estimates.

Results

During 2016–2019, 90 adolescent suicides were identified and recorded in AKVDRS and accounted for 11% (90/796) of total suicide deaths in Alaska. The average annual unadjusted suicide rate was 28.8 suicides per 100,000 adolescents aged 12–19 years. Annual rates ranged from 23.0 to 41.1 per 100,000 adolescents (Figure 1). Annual average rates were highest among males and American Indian/Alaska Native (AI/AN) youth (47.9 and 78.9 per 100,000, respectively). The suicide rate among Alaska Native adolescents nearly doubled from 2018 to 2019 (Figure 2). Rates by region were highest in the Northern and Southwest regions (116.1 and 112.5 per 100,000 persons aged 12–19 years, respectively), followed by the Interior, Gulf Coast, Anchorage, Mat-Su, and Southeast regions (30.4, 24.5, 15.4, 12.1, and 10.7 per 100,000, respectively).

Toxicology testing for drugs and/or alcohol was performed for 88 (98%) decedents; of which, 38/88 (43%) had a positive toxicology result; 27/88 (31%) were positive for marijuana use and 18/38 (47%) were positive for alcohol use prior to death.

Circumstances were known for 90 (100%) of the decedents. Frequently identified characteristics included the following:

- 45 (50%) had a history of suicidal ideation;
- 35 (39%) had a known mental health problem;
- 42 (38%) were reported to be depressed;
- 31 (34%) had a history of treatment for a mental illness;
- 31 (34%) had disclosed suicidal thoughts or intent to die by suicide with potential time to intervene;
- 29 (32%) left a suicide note or message;
- 17 (19%) had history of previous suicide attempts; and
- 17 (19%) were currently receiving mental illness treatment.

The most frequent method used by decedents was a firearm (56, 62%), followed by hanging/strangulation/suffocation (31, 34%), and all other methods (3, 3%).

Specific circumstances identified included the following:

- familial relationship stressors (27, 30%);
- intimate partner problem (22, 24%), of which, 11/22 (50%) were in crisis;
- argument preceding the incident (27, 30%);
- school problem (e.g., grades, bullying, detention; 18, 20%);
- experienced recent death of a friend or family member (7, 8%); and
- experienced a recent suicide of a friend or family member (5, 6%).

Figure 1. Number and Rate of Adolescent Suicides (N=90) — Alaska, 2016–2019

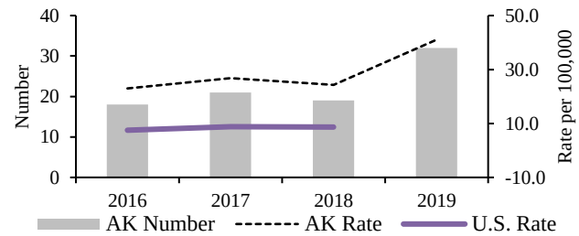
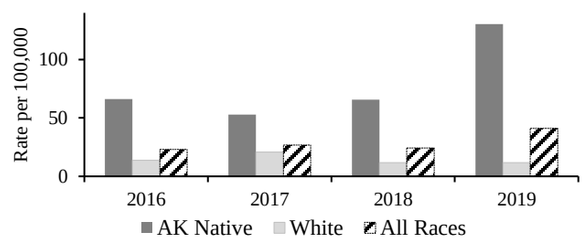


Figure 2. Rate of Adolescent Suicides by Race (N=90) — Alaska, 2016–2019



Discussion

Alaska's average annual adolescent suicide rate at 28.8 suicides per 100,000 was 3.2 times higher than the average annual U.S. rate during 2016–2018. It is not known at this time if national data will mirror Alaska's 2019 increase, which appears to be driven by a concerning increase among AI/AN youth. Coupled with rapid physical and psychological changes during this time in life, some adolescents may be overwhelmed by life stressors, exhibiting symptoms of mental pain including guilt, hopelessness, angst, fear, and rage.[3] Substance misuse is one of the most common risk factors of suicide and is known to increase the risk of suicidal ideation and behavior such as mood changes after intoxication. While life events play a role, their significance increases markedly while under the influence.

Concurrent conditions and challenges may exacerbate existing psychosocial stress levels (e.g., bullying, poverty, and traumatic events).[4] CDC's Preventing Suicide provides a range of helpful strategies that promote overall health and build positive relationships and cultural connectedness, which are vital for reducing suicidal thoughts, attempts, and deaths.[5,6] The Suicide Prevention Resource Center also provides specific resources for teens including free contact by text, phone (1-800-273-TALK or 1-877-266-HELP), and online chat with a trained specialist for emotional support and information.

References

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